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PARIS

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(12)

APPLICATION OF PATENT OF INVENTION

A1

(22) Deposit Date: **October 21, 1985**

(71) Applicant(s): **PORCHER Pierre Olivier - FR.**

(30) Priority:

(72) Inventor(s): **Pierre Olivier PORCHER**

(43) Laid Open Date of the Application: **BOPI « Brevets »
No. 17 of April 27, 1987.**

(60) References to other national related
documents:

(73) Owner(s):

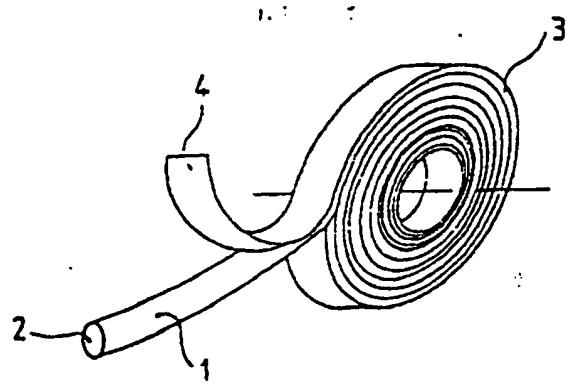
(74) Attorney(s):

(54) **Tubular adhesive tape.**

(57) The present invention relates to a supple adhesive tube with adhesive over its entire outer surface 1, and an inner smooth and slippery inner surface 2.

Such adhesive is presented as roll 3, the tube being flattened and its tubular shape is restored during unwinding operation.

Such invention is particularly intended to assemble sheets of paper, cardboard, or any other surfaces which are not subjected to important stresses and possible to be moved relatively from each other after or during their assembling operation.



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Assemble two surfaces together by means of double adhesive face tapes is well known.

However, these adhesives do not allow relative positioning of two surfaces to be adjusted, without having the risk to deteriorate them.

Tubular adhesive tape, according to this invention, allows assembling two surfaces together, permitting relative adjustment of these surfaces, during and after their assembling operation.

In fact, adhesive tape is presented as a roll, tubular tape being flattened and protected by a protective film.

During unwinding operation, its elastic properties restore its tubular shape, therefore avoiding it to stick to itself, thus facilitating its handling.

After unwinding one section of tubular adhesive tape, the user places the tape over the surface to be covered, then uncover the adhesive surface.

In case of error after its application, the user will carefully move the adhesive surface, either for adjusting its position, or to eliminate adhesive tube by rolling it, without deteriorating the assembly for that.

Figure 1 shows perspective view of a supple adhesive tape, according to this invention, with its adhesive outer surface (1) and smooth inner surface (2).

Roll (3) shows a section of flattened tube which is restored to its tubular shape due to elasticity of its section, during unwinding operation.

Anti-adhesive (or release) film (4) placed inside the spiral formed by adhesive tube, facilitate its unwinding operation.

As example, Figure 2 shows two lengths of adhesive tube during the positioning of two surfaces (5).

Figure 3 shows for the same example, two lengths after positioning of surfaces (5), always permitting an adjustment of their relative position.

Figure 4 shows four sections of adhesive tube, placed such to allow a relative rotation of both surfaces (5) around a convergence point of axes corresponding to these four sections.

Figure 5 shows four sections after the positioning of both surfaces (5), always permitting an adjustment of their relative position.

Adhesive tape according to this invention is particularly intended to assemble sheets of paper, cardboard, or any other surfaces which do not subject to important stresses.

It goes without saying that materials in use will be the same as those used for known type of adhesive tapes, (example: vinyl or cellulose polychloride), as well as adhesive materials, preferably synthetic, with the condition of having sufficient elasticity to permit tubular shape of adhesive tape to be restored after its unwinding operation.

Moreover, thickness of material should be in proportion with adhering power of the tube and such to remain flattened after being used.

An embodiment of such adhesive tape may be obtained by extrusion or weaving, for example, in the case of synthetic fibers.

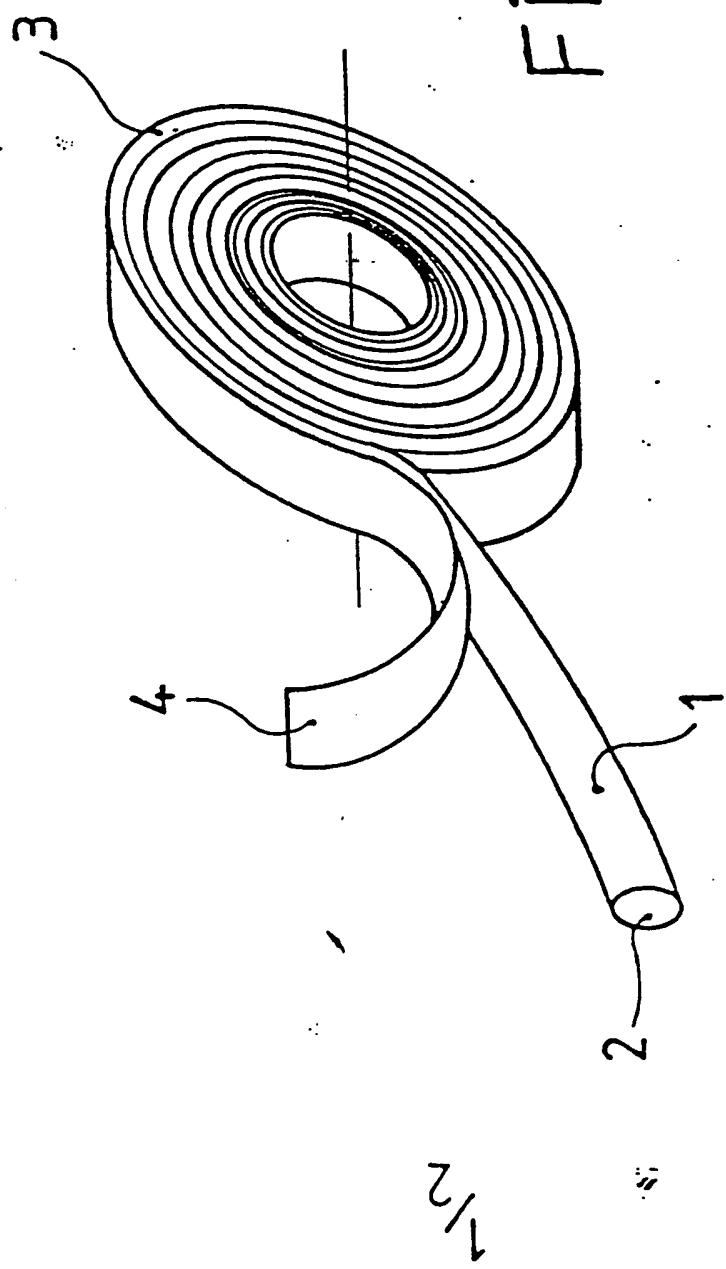
The result is that diameters, thicknesses and materials in use for making such adhesive, will vary largely depending on applications.

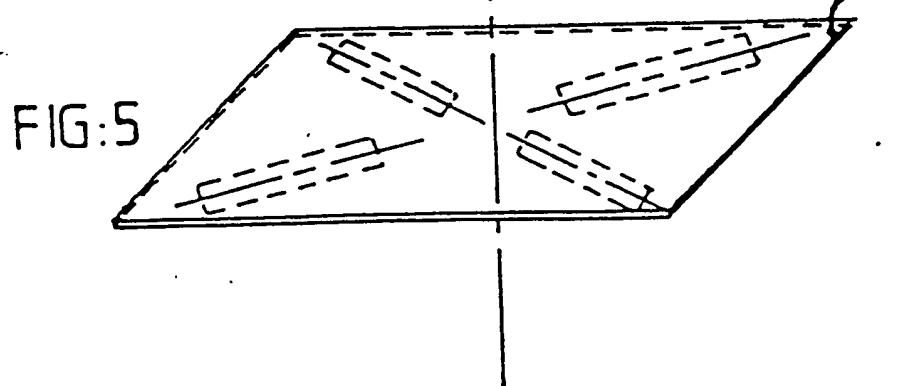
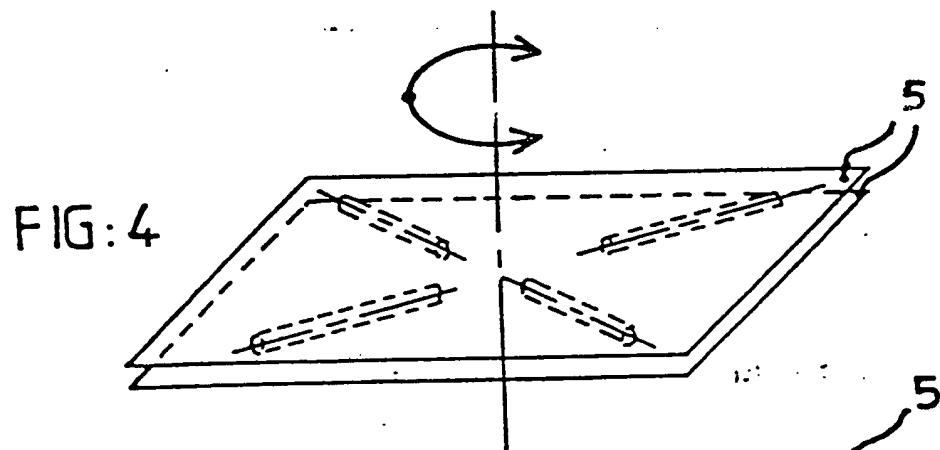
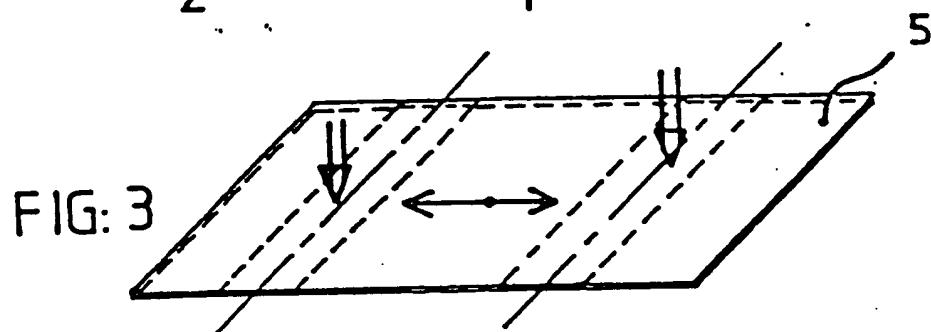
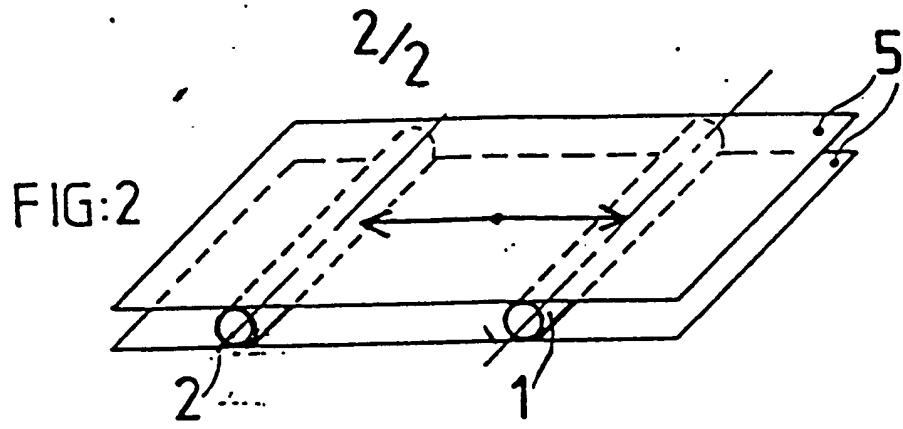
C L A I M S

1. Adhesive tape, characterized by its tubular shape, whose outer surface (1) is adhesive, and inner surface (2) is smooth and slippery.
2. Adhesive tape according to claim 1, characterized by the fact that its presentation is obtained by rolling it over itself, thanks to its surface (1) adherence over a protective film (4), tube being flattened and resored to its tubular shape by elasticity during unwinding operation.

Translated by Henry D. Mai
Member of A.T.A.
February 1994

FIG: I





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DEMANDE DE BREVET D'INVENTION

A1

22 Date de dépôt : 21 octobre 1985.

30 Priorité :

71 Demandeur(s) : PORCHER Pierre-Olivier. — FR.

43 Date de la mise à disposition du public de la
demande : BOPI « Brevets » n° 17 du 24 avril 1987.

60 Références à d'autres documents nationaux appa-
rentés :

72 Inventeur(s) : Pierre-Olivier Porcher.

73 Titulaire(s) :

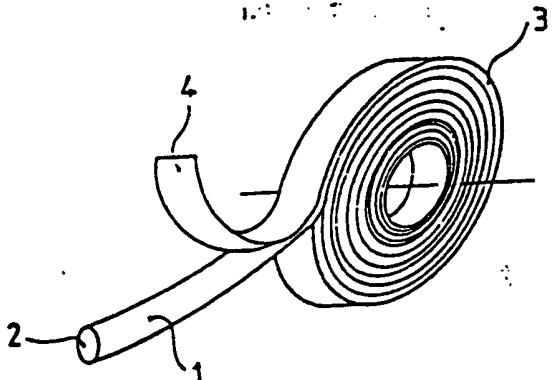
74 Mandataire(s) :

54 Ruban adhésif tubulaire.

57 La présente invention concerne un tube adhésif souple,
présentant une paroi adhésive sur toute sa surface extérieure 1,
et une paroi intérieure lisse et glissante 2.

Le conditionnement d'un tel adhésif se présente sous la
forme d'un rouleau 3, le tube étant aplati et reprenant sa
forme tubulaire lors de son débitage.

Une telle invention est particulièrement destinée à l'assem-
blage de feuilles de papier, de carton, ou de toutes autres
surfaces ne subissant pas de contraintes importantes et du-
déplacement relatif possible de ces surfaces après ou pendant
leur assemblage.



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PORCHER P O

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Tubular adhesive tape - with smooth inner surface and adhesive outer surface
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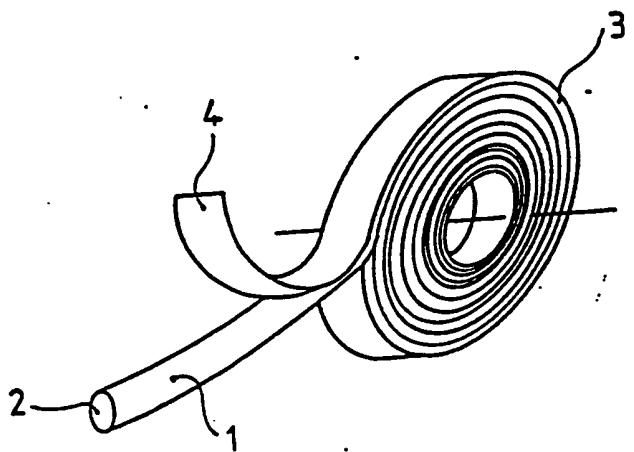
An adhesive tape is tubular with a smooth inner surface and an adhesive outer surface.

The tube is pref. flattened, stuck to a protective film on one side, and wound into a roll, so that its elasticity restores its tubular shape when unwound. The tape may be of extruded polyvinyl chloride or cellulose, or of synthetic cloth.

USE/ADVANTAGE

Used to stick sheets of paper or cardboard together, and unlike conventional double-sided tape allows the final positions of the sheets to be adjusted. (7pp1658PADwgNo1/5).

G(3-84)



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- I -

Il est connu d'assembler deux surfaces l'une sur l'autre au moyen de rubans présentant une double face adhésive.

Toutefois, ces adhésifs ne permettent pas une correction de positionnement relatif des deux surfaces, au risque de les détériorer.

Le ruban adhésif tubulaire, selon l'invention, permet l'assemblage de deux surfaces l'une sur l'autre, autorisant une correction relative de ces surfaces, pendant et après leur assemblage.

10 En effet, le ruban adhésif se présente sous forme de rouleau, le tube étant aplati et protégé par un film protecteur.

Lors du débitage, ses propriétés élastiques lui redonnent sa forme tubulaire, lui évitant ainsi de se coller sur lui-même, ce qui facilite sa manipulation.

Après avoir débité une section du tube adhésif, l'utilisateur place celle-ci sur la surface à couvrir, puis dispose la surface à coller.

En cas d'erreur après l'application, l'utilisateur fera 20 glisser délicatement la surface à coller, soit pour en corriger sa position, soit pour éliminer le tube adhésif par roulement, sans pour autant détériorer l'ensemble.

La figure I représente une perspective du ruban adhésif souple selon l'invention, laissant apparaître la paroi extérieure adhésive(1) et la paroi intérieure glissante(2).

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Le rouleau(3) montre la section du tube aplati,celui-ci reprenant sa forme lors du débitage,grâce à l'élasticité de sa section.

Le film anti-adhésif(4) placé à l'intérieur de la spire 5 formée par le tube adhésif,facilite son débitage.

La figure 2 représente à titre d'exemple deux longueurs de tube adhésif pendant le positionnement de deux surfaces(5).

La figure 3 représente pour le même exemple,les deux 10 longueurs après positionnement des surfaces(5),autorisant toujours une correction de leur position relative.

La figure 4 représente quatre sections de tube adhésif, disposées de façon à permettre une rotation relative des deux surfaces(5) autour du point de convergence des axes 25 correspondant aux quatre sections.

La figure 5 montre les quatre sections après positionnement des surfaces(5),autorisant toujours une correction de leur position relative.

Le ruban adhésif selon l'invention est particulièrement 20 destiné à l'assemblage des feuilles de papier,carton,ou toutes autres surfaces ne subissant pas de contraintes importantes.

Il va de soi que les matériaux utilisés seront les mêmes que ceux utilisés pour les rubans adhésifs de type connu, 25(ex: polychlorure de vinyl ou cellulose),ainsi que les tissus adhésifs,de préférence synthétiques,à condition de présenter une élasticité suffisante pour permettre au ruban adhésif de restituer une forme tubulaire après son débitage.

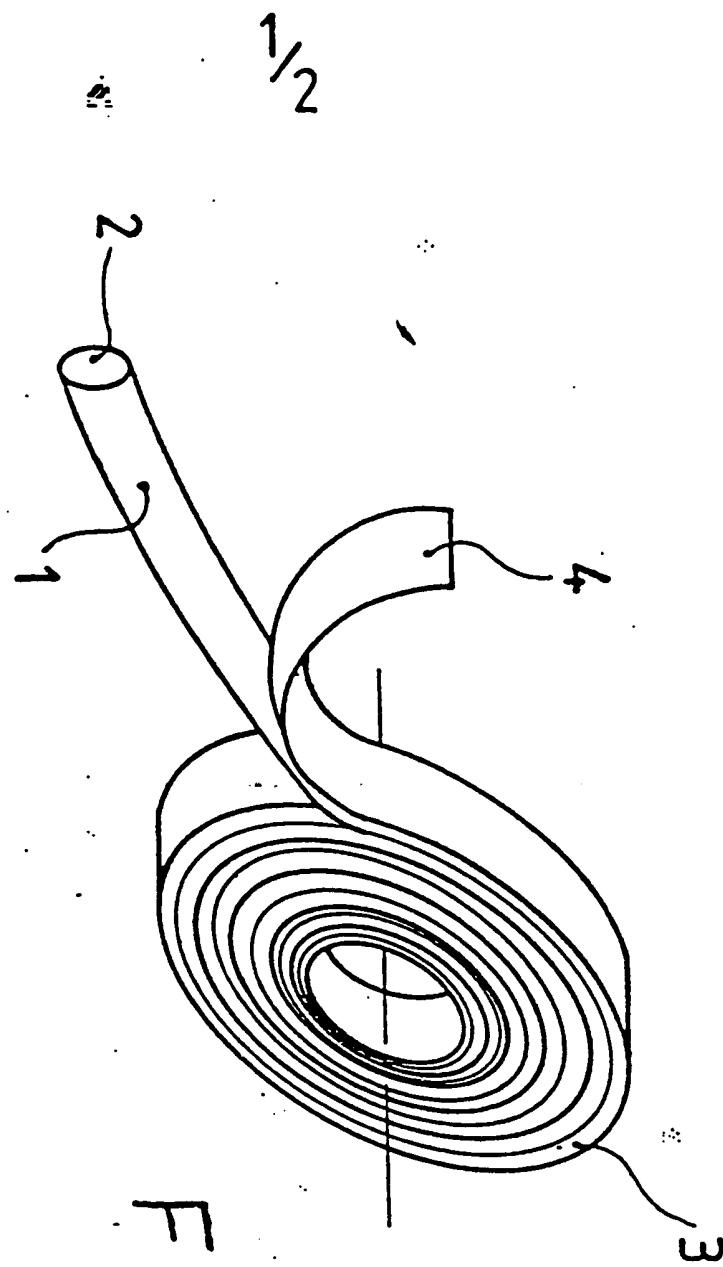


FIG: I

FIG:5

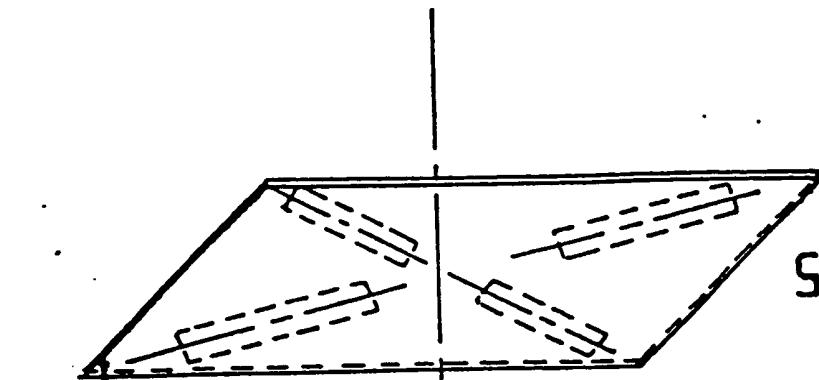


FIG:4

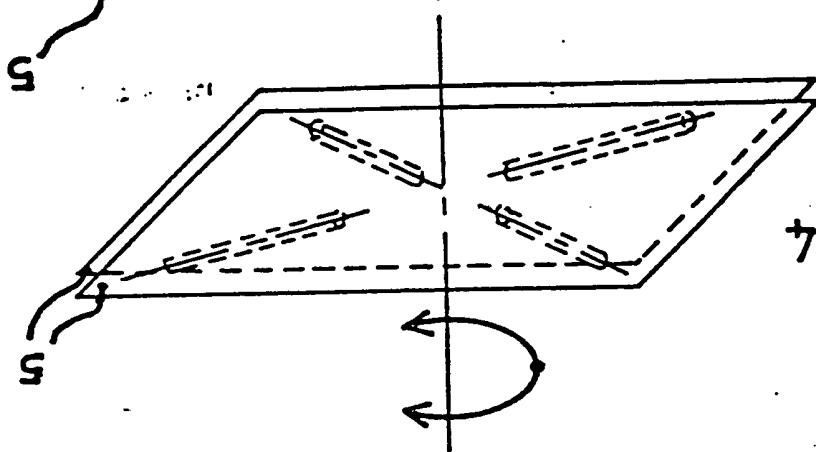


FIG:3

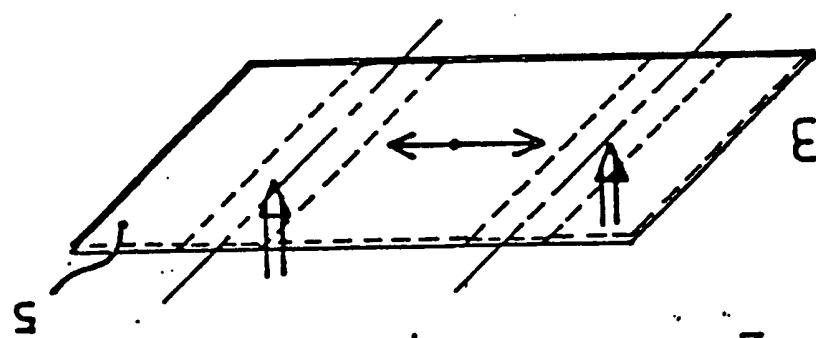
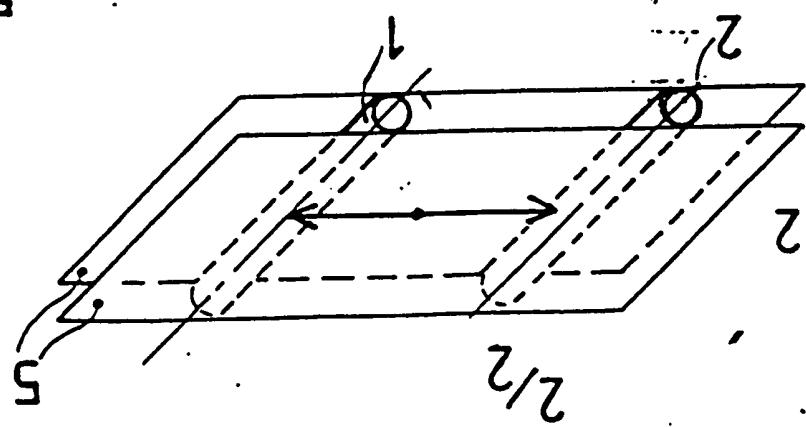


FIG:2



- 4 -

R E V E N D I C A T I O N S

- I) Ruban adhésif, caractérisé par sa forme tubulaire, dont la paroi extérieure(I) est adhésive, et la paroi intérieure(2) lisse et glissante.
- 2) Ruban adhésif selon la revendication I, caractérisé par le fait que le conditionnement est obtenu par enroulement de celui-ci, grâce à l'adhérence de la paroi(I), sur un film protecteur(4), le tube étant aplati et reprenant sa forme tubulaire lors du débitage par élasticité.